Amendment

In the Claims

1. (Currently amended) A method of lubricating two sliding surfaces, wherein at least one surface is a charged surface, comprising administering between the two surfaces a lubricating composition,

wherein the lubricating composition comprises a graft copolymer ~~with~~ comprising a polyionic backbone and non-interactive side chains and an aqueous medium,

wherein the graft copolymer is selected from the group consisting of (1) brush copolymers having the formula $(A)_x$-b-$(B)_y$, with a backbone of poly(B) and bristles composed of poly(A); (2) AB block copolymers having the formula $(A)_x(B)_y$; and (3) ABA block copolymers, having a formula selected from the group consisting of $(A)_x(B)_y(A)_z$ and $(B)_x(A)_y(B)_z$;

wherein A is a monomer, the polymer of which forms the non-interactive side chains; B is a monomer, the polymer of which forms the polyionic backbone; x is an integer of greater than or equal to 5; y is an integer of greater than or equal to 3; and z is an integer greater than or equal to zero,

wherein the polyionic backbone adsorbs onto the charged surface to produce a lubricated surface, wherein the non-interactive side chains do not interact or bind with the charged surface, and wherein the resulting lubricated surface has a lower friction coefficient between the

lubricated surface and ~~a~~ the second sliding surface than the coefficient of friction between the charged surface and the second sliding surface in the absence of the lubricating composition.

2. (Original) The method of claim 1, wherein the polyionic backbone is poly(cationic).

3. (Previously presented) The method of claim 2, wherein the polyionic backbone is selected from the group consisting of nonpeptide polyamines, polyamino acids and polysaccharides having net positive charge at neutral pH.

4. (Withdrawn) The method of claim 3, wherein the polyionic backbone is poly-L-lysine.

5. (Original) The method of claim 1, wherein the polyionic backbone is poly(anionic).

6. (Original) The method of claim 5, wherein the polyionic backbone is a polyamino acid having net negative charge at neutral pH.

7. (Withdrawn) The method of claim 6, wherein the polyamino acid is poly(L-glutamic acid).

8. (Original) The method of claim 1, wherein the non-interactive side chains are poly(ethylene glycol) chains.

9. (Original) The method of claim 8, wherein the poly(ethylene glycol) chains are modified to contain a functional group at the free end.

10. (Original) The method of claim 9, wherein the copolymer further comprises biotin, wherein the biotin is attached to at least one poly(ethylene glycol) chain.

11. (Withdrawn) The method of claim 1, wherein the charged surface is a metal oxide.

12. (Currently amended) A device or machine comprising ~~Two~~ two sliding surfaces, wherein at least one surface is a lubricated surface, comprising a charged surface and a lubricating composition, wherein the lubricating composition comprises a graft copolymer with a polyionic backbone and non-interactive side chains and an aqueous medium, wherein the polyionic backbone adsorbs onto the charged surface, wherein the non-interactive side chains do not interact or bind with the charged surface, and wherein the lubricated surface has a lower friction coefficient between the lubricated surface and the second sliding surface than the coefficient of friction between the charged surface and the second sliding surface in the absence of the lubricating composition.

13. (Withdrawn-Currently amended) The ~~lubricated surface~~ device or machine of claim 12, wherein the graft copolymer is PLL-g-PEG.

14. (Withdrawn-Currently amended) The ~~lubricated surface~~ device or machine of claim 12, wherein the charged surface is a metal oxide.

15. (Canceled)

16. (Previously presented) The method of claim 1, wherein the charged surface is oxidized silicon.

17. (Currently amended) The ~~lubricated surface~~ device or machine of claim 12, wherein the charged surface is oxidized silicon.

18. (Currently amended) The ~~lubricated surface~~ device or machine of claim 12, wherein the polyionic backbone is selected from the group consisting of nonpeptide polyamines, polyamino acids and polysaccharides having net positive charge at neutral pH.

19. (Canceled)

20. (Canceled)

21. (New) The device or machine of claim 12, wherein the graft copolymer is selected from the group consisting of (1) brush copolymers having the formula $(A)_x$-b-$(B)_y$, with a backbone of poly(B) and bristles composed of poly(A); (2) AB block copolymers having the formula $(A)_x(B)_y$; and (3) ABA block copolymers, having a formula selected from the group consisting of $(A)_x(B)_y(A)_z$ and $(B)_x(A)_y(B)_z$;

wherein A is a monomer, the polymer of which forms the non-interactive side chains; B is a monomer, the polymer of which forms the polyionic backbone; x is an integer of greater than or equal to 5; y is an integer of greater than or equal to 3; and z is an integer greater than or equal to zero.

22. (New) The method of claim 1, wherein the non-interactive side chains are neutral water-soluble polysaccharides.

23. (New) The method of claim 22, wherein the neutral water-soluble polysaccharides comprise dextran.

24. (New) The device or machine of claim 12, wherein the non-interactive side chains are neutral water-soluble polysaccharides.

25. (New) The device or machine of claim 24, wherein the neutral water-soluble polysaccharides comprise dextran.